CHAPTER 4

SYSTEMS ANALYSIS ELEMENTS OF THE PROPERTY ADMINISTRATION PROCESS

A. PROPERTY CONTROL SYSTEM ANALYSES

1. General

a. Contractors are required to establish and maintain an adequate property control system to control, protect, preserve and maintain all Government property as required by the Government property clauses. This property control system normally shall comply with the requirements of FAR 45.5, DFARS 45.5, agency-specific, requirements and any other contractually specified requirements. There are exceptions where a contractor need not control the Government property in its possession in accordance with FAR 45.5. Exceptions are found in FAR 45.105(b) by using the Government property clause at FAR 52.245-1. Another exception where contractors need not control Government property in accordance with FAR 45.5 is found in the clause at FAR 52.245-4.

b. The property control system established and maintained by the contractor normally consists of written property control procedures, and the application and/or compliance with those procedures. It is normal industry practice to provide for the control of property by means of written procedures that communicate company standards, techniques, and instructions to operational personnel. These procedures provide the PA with the yardstick by which the contractor's application and/or compliance shall be evaluated. The PA shall evaluate the contractor's written procedures and the application and/or compliance thereof.

c. The analysis of a contractor's property control system during contract performance is a critical responsibility assigned the PA. It is through this analysis that the PA determines whether the contractor is effectively and efficiently complying with the terms and conditions of the contract, regulatory requirements, and other special requirements contractually imposed by the procuring activity. The system analysis may reveal unsatisfactory conditions. These unsatisfactory conditions may in turn lead to the disapproval of the contractor's property control system and a subsequent increase in the contractor's liability for any loss, damage or destruction of Government property.

d. The PA has available many tools that may be used to evaluate and analyze the contractor's property control system. These tools consist not only of the statistical methodologies" available but the judgement and expertise that the PA develops through experience. To effectively evaluate the contractor's property control system, the PA must be familiar with the contractor's operation, types and amounts of property, the complexity of the contractor's system, previous experience regarding the adequacy of control, and the

reliability of the contractor's system.

2. Property Svstem Status. A contractor's property control system may exist in one of four different statuses. These consist of Presubmission, Nonacceptance and/or Withheld, Approved, and Disapproved and/or Withdrawn Status.

a. Presubmission status exists when a contractor's property control system has neither been formally nonaccepted, approved, or disapproved.

b. Nonacceptance and/or Withheld status exists when a contractor who has never had an approved property control system submits a procedure to the PA, deficiencies exist and are not corrected. The CO, based upon the PA's recommendation, formally notifies the contractor of the nonacceptance of the property control system. This may also occur when a contractor fails to submit a written procedure in accordance with the Government property clauses.

c. Approved status exists when the contractor has a property control system approved by the PA.

d. Disapproved and/or Withdrawn status exists when the contractor previously had an approved property control system but the PA was unsuccessful at obtaining contractor correction of deficiencies; the CO, based upon the PA's recommendation, has formally notified the contractor of the disapproval and/or withdrawal of the property control system.

3. Levels of Property Control Svstem Analyses. Completion of property control system analyses may require detailed tests, examinations, and evaluations over an extended period of time. However, an analysis of a contractor's property control system involving only small dollar amounts of property and simple property control methods may often be accomplished without plant visits or extensive testing by the PA. To more efficiently and effectively assign resources, property control system analyses may take one of two forms: Standard or Limited Analyses.

a. Standard analyses normally take place at a contractor's place of operation over an extended period of time involving complex property control systems. This analysis usually covers all applicable functions with detailed workpapers generated, summaries provided, and formalized conclusions drawn as to the condition of the contractor's operations. The depth and detail of review and analysis are far greater for a standard system analysis than for a limited system analysis.

b. Limited analyses may be applied to contractors with property control systems that involve small dollar amounts or quantities of Government property. Limited analyses should be accomplished without plant visits except that the PA shall visit contractor's operations no more than once every 3 years when designated for limited analyses, unless the PA is aware of problems that exist that may require increasing the frequency of visits. When

limited analyses of the contractor's property control system is considered adequate to protect the interest of the Government, a written determination to that effect shall be prepared by the" PA and placed in the Contract Property Control Data file. The PA shall consider previous analyses experience, contractor's personnel, and the complexity and reliability of contractor's property system, before determining whether limited analyses shall be performed.

(1) Limited analyses may be applied when Government property under one or more contracts consists of no more than $500,000 exclusive of reparable on overhaul and maintenance contracts.

(2) Limited analyses shall not be applied when sensitive property is in the possession of the contractor.

4. Frequency of Property Control System Analyses

a. A contractor's property control system may be subject to analyses as frequently as conditions warrant. These analyses may take place at any time during contract performance, upon contract completion or termination, or at any time thereafter during the period that the contractor is required to retain such records.

b. A system analysis shall be conducted at least once each fiscal year to obtain knowledge of the contractor's system of property control. Unless individual Agency policy dictates otherwise, the PA may choose, due to the reliability of the contractor's property control systems, to perform the analysis using one of the following methods:

(1) Biennial analysis for contractors who have initially demonstrated 3 consecutive years of satisfactory property control system performance and continue satisfactory system performance. An unsatisfactory system analysis will result in demonstration of 3 consecutive years of satisfactory property control system performance prior to reinstating biennial system analysis, or

(2) Waive review of selected functions or functional segments as evidenced by, but not limited to, the following factors:

(a) Satisfactory compliance with the applicable Government regulations and contractual requirements over an extended period of time, and/or

(b) Stability of the quantity of Government property in the contractor's possession.

--- (c) PA's first hand knowledge of the contractor's property control system.

c. In no instance shall any applicable function or functional segment be reviewed any less often than once every 2 years. Schedules may be modified to reflect changes in the property control system analyses.

5. Planning of Property Control System Analyses

a. A system analysis plan shall be developed for each contractor's plant covering the property control system used in connection with Government contracts. The plan shall provide for analyses and shall be augmented to cover responsibilities imposed by new contracts, changing conditions, or marginal performance.

b. The PA must develop and determine in the system analyses plan which functions, functional segments and criterion (see Appendix A) of the contractor's property system warrant examination. Only those functions and functional segments applicable to the contractor, the types of property accountable, and the activities involved need be subject to review. Those functions not applicable shall not be reviewed. Limited dollar amounts and activity, types of property, complexity of the contractor's system, risk to the Government, and previous experience regarding the adequacy of contractor controls are factors the PA may consider in determining the extent and scope of the system analysis plan. Before the initiation of any system analysis, the PA shall establish a system analysis plan which shall provide, as a minimum:

(1) Listing of the functions, functional segments, and criteria identifying those items that are applicable, not applicable, or deferred.

(2) Listing of the estimated line items of property by type.

(3) Record of the evaluation of procedures portion of the approved property control system applicable to the functions to be examined, and noting of any portions thereof that should be reviewed with operating personnel for possible updating.

(4) Survey files shall contain sufficient narrative and documentation reflecting rational for deferring accomplishment of the functions or functional segments.

6. Scheduling of Property Control System (PCS) Analyses

a. At the beginning of each fiscal year, the PA shall prepare a schedule showing the names of the contractors and the projected dates on which each system analysis shall take place. In the case of PAs assigned to one contractor; e.g., resident versus itinerant, this schedule shall consist of the function and/or functional segment and the projected dates on which that function's analysis shall take place.

b. When the survey involves CAS elements other than Property Administration, the PA shall coordinate the planning and scheduling with the other elements. The PA will

share available, pertinent information when planning and scheduling with other involved CAS elements.

c. At major contractors, surveys of major functions such as utilization and maintenance may have to be scheduled over the entire year. When a contractor's system involves the use of substantial quantities of equipment and/or tooling, it may be necessary to conduct surveys of the functions of utilization and maintenance on a continual basis.

7. Initial Contact With New Contractors. Normally, the initial contact by the Contract Administration Office with a contractor is through a pre-award survey, postaward conference or postaward letter. (See FAR 42.5). When a conference is held, the PA shall assure suitable discussion of property administration responsibilities and any items of special interest or impact on the contractor, such as known deficiencies, a disapproved or withheld property control system, or the absence of a property control system. When a conference is not held, the PA, upon assignment of a contract for property administration, shall forward a letter to the contractor:

a. Inviting attention to the contractor's responsibilities regarding Government property under the contract, including any specialized controls, and the extent of his liability for loss, damage, or destruction of Government property during any period in which the contractor's property control system does not have the written approval of the PA.

b. Requesting the name of the contractor's representative(s) to contact for review and discussion of the proposed property control system.

c. Requesting that written procedures be provided for evaluation which comply with FAR 45.5 and other applicable regulations and contractual requirements.

d. Arranging an entrance interview with the contractor to discuss these items.

8. Initial Evaluation of the Contractor's Property Control System

a. Initial Evaluation of Contractor Procedures. PAs are required to review contractor procedures for the proper management of Government property. Procedures for the control of Government property must identify the nature of the action(s) to be taken and the type(s) of property involved, assign responsibilities and acceptable timeframes for those actions, and describe the methods for performing the prescribed tasks. An effective guide in evaluating the contractor's property control procedures is to compare the type(s) of property and control requirements by using the applicable functions in this Manual. Broad statements such as, "It is the company policy to protect Government property" are of little value in providing contractor's operating personnel with instructions for receipt and issue of materials, maintenance to be performed on certain types of equipment, or the control or utilization of property to ensure it is used only for authorized purposes.

b. Following assignment of an initial contract, and upon submission of the written procedures, the PA shall review the procedures portion of the contractor's property control system to determine:

(1) Areas in the proposed procedures which fail to comply with FAR 45.5 and other contract requirements.

(2) Essential controls not provided by the proposed procedures.

(3) Areas in the proposed procedures requiring physical observation or verification.

(4) Subcontractors or secondary locations of prime contractor performance, and the need for physical observation or verification of property controls at those locations.

This initial evaluation may take place at either the PA's office or at the contractor's place of operation.

c. Procedures for Contractors with Limited Amounts of Property. Though it is normal industry practice to provide for the control of property through the use of written procedures, a contractor with few employees may not have a need for written procedures for effective management of Government property. In such cases, the PA shall evaluate the adequacy of the contractor's system on the basis of the contractor's explanation of his or her controls and observation of the application thereof. The PA shall prepare a brief written description of the applicable procedures for inclusion in the Contract Property Control Data File, as well as providing the contractor a copy. In this instance, the contractor's signature shall be obtained signifying his concurrence with the PA's written description. If the contractor will not concur with the written description, the contractor shall be required to independently prepare a written property control procedure.

d. Initial Evaluation of Application of Contractor Procedures. PAs shall evaluate the application of the contractor's procedures to ensure they meet the criteria for property control established and required by FAR 45.5 and other contract requirements, as appropriate. Normally, this requires the PA to visit the contractor's place of operation to determine that the application of the property control system provides adequate controls for the Government property to be furnished or acquired. The PA shall make any necessary tests of the contractor's application and compliance with the procedures. The choice of methods to be used to obtain the information necessary for approval of a contractor's property control system is a matter of judgement by the PA. Test examinations, analysis, and verification in specific functions may be necessary to ensure the reliability of the final evaluation and conclusions as to the acceptability of controls for all functions and the system as a whole. ---

9. Evaluation of a Contractor's Existing Property Control System. When a

contractor's property control system has previously been approved and a new contract requires the expansion of existing controls or the establishment of addition controls, the review should normally be limited to the new contract requirements. If the system is adequate, the PA shall record this fact on the property summary data record for the contract. Notification to the contractor is not required. However, if the PA determines that the contractor's property control system does not adequately meet the new contract requirements, the contractor shall be notified in writing of the required changes and shall be requested to revise the procedures within a reasonable period of time.

10. Performance of Property Control System Analyses

a. Notification of System Analyses. The PA shall notify the contractor in writing of the planned dates for the system analyses no later than 30 days before the commencement of the review. A system analysis may be rescheduled if the review will adversely impact the contractor. The PA shall ensure that this rescheduling does not delay performance-of the review past the end of the fiscal year.

b. Entrance Interview. An entrance interview shall be held with contractor managerial personnel to inform the contractor of the scheduled system analysis, timeframe for performance, functions subject to review, and other pertinent items; e.g., previously disclosed deficiencies, new contractual requirements, etc. PAs are encouraged to discuss proposed criteria with contractors in advance of system analysis and to provide contractors with a list of criteria to be used.

c. Conducting Property System Analyses. Property system analyses shall be conducted in a manner to assure efficient use of Government and contractor resources. Related property control criteria shall be jointly analyzed during the review. Property system analyses shall include reviews comparing "records to property" and "property to records. " PAs shall determine property control criteria to be used in conjunction with scheduled property systems analyses. See Section C. of this chapter for specific direction by property category and function.

11. Correction of Unsatisfactory Conditions

a. Identification of Deficiencies. When element or item defects are identified during the system analysis, PAs shall take the following actions:

(1) Determine whether the defects are isolated or are systemic in nature.

(2) Assess the known or perceived impact of defects.

(3) Determine the cause of the defects, where possible.

(4) Notify the responsible contractor management personnel of the defects

and request corrective action.

b. Resolving Identified Defects. Minor or isolated property defects that can be corrected during the performance of the analyses should be resolved at the lowest possible management level with verbal or limited written contact. Systemic defects must be formally documented and reported to an appropriate level of contractor management. If these defects create a significant risk-of-loss, damage, or destruction of Government property, notify the contractor that failure to immediately correct the defects constitutes the basis for property system disapproval which potentially increases the contractor's liability. The PA shall followup to ensure that corrective actions are taken.

c. Notification to the Contractor of Deficiencies. The PA shall forward to the contractor a listing of the deficiencies found during the evaluation of the property control system. The PA shall state within this notification, if obtained during the exit interview, agreement by the contractor to correct the deficiencies. The period of time for corrective action shall normally be established at 90 days. This time frame may vary, either increased or decreased, dependent upon the complexity and nature of the corrective action(s) required and the impact of the deficiencies involved.

d. Resolution of Differences. When the PA is not successful in obtaining compliance with recommendations for corrective actions, the PA shall advise the CO by memorandum that shall include:

(1) A specific, concise documented statement of open problems.

(2) An assessment of the impact of the defects.

(3) A statement of the contractor's positions.

(4) Recommendations for action including disapproval and/or withdrawal of the property control system, where appropriate. For further guidance, see Chapter 3 of this Manual, Evaluation and Approval of Contractor's Property Control System, and FAR 45.104.

12. Exit Conference with the Contractor. Upon completion of the system analysis, the PA shall conduct an exit conference with the contractor's managerial personnel to discuss the overall results of the system analysis. In addition, this conference must also address any function or functional segment in which the adequacy of controls, procedures, or the application thereof was found to be unsatisfactory. The PA shall advise the contractor where corrective action is required. Agreement should be reached during the exit conference as to the corrective measures necessary.

13. Letter of Approval for the Contractor's Property Control System. When the contractor's property control system is acceptable, the PA shall, in accordance with FAR

45. 104(b) and 45.502(a), so advise the contractor in writing approving the property control system. This letter is only provided at the initial approval of the contractor's property control system or reapproval after the contractor's property control system has been disapproved or withdrawn.

14. Nonacceptance or Disapproval of a Contractor's Property Control System

a. The PA must be aware that the only Government representative who has the authority to not accept or disapprove a contractor's property control system is the CO. (See FAR 45. 104) The PA does not have this authority. The nonacceptance or disapproval of a contractor's property control system is a most serious action with far reaching implications. As the CO is responsible for the overall performance of the contractor and their relationship with the Government, this authority is not delegated to the PA through the Certificate of Appointment.

b. PA's Responsibilities Under a Disapproved and/or Withdrawn System. During a period of system disapproval, the PA shall continuously review contractor management of Government property to determine instances where the contractor shall be held liable for property loss or damage. Property system reapproval is contingent upon the contractor satisfactorily correcting outstanding defects. Special attention will be given to ensuring that any LDD occurring during a period of property system disapproval is identified before . reapproval. Priority emphasis will be given to reexamination and testing of the property system functions, functional segments, and criteria where defects have previously been found before system reapproval.

15. Record of System Analysis. As each function is analyzed, the acceptability of the procedures and application shall be appropriately noted or commented on as the basis for the record of system analysis. Upon completing the analysis of the contractor's property control system, the PA shall prepare a written report. This report shall contain a listing of the participating contractor and Government personnel, the PA's findings to support approval of the system, requirement for corrective action prior to such approval, or referral to the CO in cases where the PA is unable to obtain correction of the unsatisfactory condition(s).

16. Summary of Findings

a. At the conclusion of each property system analysis, the PA shall prepare a written summary of findings to support continued approval of the system and/or defects identified and their impact on system approval. System analysis summaries shall be executive-level documents written to concisely communicate property issues to levels of management unfamiliar with property technical terms. Summaries must be written to clearly convey the results of property system analyses in general terms. A formal record shall be prepared by the P-A in the following format:

(1) Introduction: Provide contractor's name and address, period of system

analysis, and types of property involved, and applicable procedures.

(2) Methods Used: Summarize methods used in performing the review.

(3) Conclusions: State defects identified and conclusions reached.

(4) Actions taken by the contractor and remaining actions, if any, necessary to correct defects.

b. In the case of a satisfactory limited analysis, the PA shall not prepare a formal summary record. For limited analyses, the file shall be documented to indicate the extent and results of the review. In ail other cases, a summary of the system analysis shall be forwarded to the contractor. In those instances where defects exist, the contractor shall be advised of any defects and requested to correct them within prescribed periods. The contractor shall also be advised that failure to correct the defects may result in disapproval of its property control system.

c. For standard analyses, the PA shall prepare a letter transmitting the system analysis summary to the contractor, noting whether the contractor is rated satisfactory or unsatisfactory for system analysis purposes. For limited analyses not requiring a formal summary, the PA shall prepare a letter notifying the contractor of their satisfactory or unsatisfactory rating for system analysis purposes.

d. Distribution of Summary. A copy of the property system analysis summary shall be retained in Contract Property Control Data File, and whenever unresolved defects have been disclosed, a copy of the summary shall be provided to the CO. When the nature of the defects has significant impact on individual contracts or programs, the Procuring Contracting Officer shall also be advised in writing. A copy of the Property Control System Analysis Summary shall be forwarded to all delegating offices; e.g., Support Property Administration Delegations, NASA (see NASA Delegation Instructions), etc.

e. Property Control System Analysis Case File. A case file shall be established for each system analysis performed containing the survey plan, work papers, and the summary. This file will also include all correspondence of discussions, actions, and followup to obtain correction of any unsatisfactory condition. The case file shall be maintained in the Contract Property Control Data File or the Contractor's General File.

B. SAMPLING

1. General. Sampling is a tool to support the PA's judgement; it does not supplant that judgement. -Moreover, use of sampling methods and the results thereof shall be subject to judgment and determination by the PA. The PA must be aware that, when large quantities of documents and actions must be reviewed, sampling is more efficient and economical than 100 percent inspection. Sampling is an effective method for reviewing or analyzing a system

whereby an accurate snapshot in time may be obtained. There are times when the PA through observation and judgement may see or become aware of deficiencies in a contractor's property control system that do not lend themselves to analysis through statistical methodologies. Therefore, the PA must be skilled in various audit methods in order to protect the Government's interest.

2. Types of Sampling

a. There are numerous approaches to sampling that are determined by the different fields from which they emerge. The two major approaches are quantitative and qualitative. Statistical sampling comes out of the quantitative methods approach. Judgement and purposeful sampling come out of the qualitative methods approach. It should be noted by the PA that both of these approaches have their own strengths and weaknesses. The PA should be familiar with which approach best suits the function, functional segment, and criterion undergoing analysis.

b. When using a sampling plan, the Government's risk shall not exceed 10% (a 90% confidence level) excepting slight variations due to changes in population sizes. Appendix B contains sampling plans for use in achieving this 90% confidence level. Using this sampling plan the Government will discover defects of 10% or more, if they exist, 90% of the time.

c. CLASS I. Statistical Sampling is the process by which a number of items are selected from the population for analysis so that the sample is representative of the entire population from which it was selected. Statistical sampling is useful where large numbers of items are subject to review and where it is not cost-effective to review all items. This sample allows the PA to review a small number of randomly selected items of a particular functional segment and reach a judgement as to the acceptability of the entire functional segment. Appendix B sets forth the population ranges and sample sizes required for a double sampling plan. Random numbers may be generated either through the use of Appendix C or any other available random number table or computer program designed for such a purpose. Other random selection techniques may be applied (i.e., selecting every thirtieth item) provided they are defined beforehand in the property administration survey plan.

d. CLASS 11. Judgment Sampling is the process by which a number of items or areas are selected from the population for analysis without meeting the random selection and sample size criteria in Appendix B. Judgment sampling is useful for functional segments that do not lend themselves to any other methods of sampling; i.e., reviewing the contractor's operation from a floor to records analysis.

e. _, CLASS 111. Purposeful Sampling.

(1) Purposeful sampling is the process by which known, suspected, or reported conditions of a critical or substantial nature are used to select areas, items, or

actions for review to determine the possible adverse systemic impact. It is especially critical, when using purposeful sampling, that items being researched have the potential for significant systemic impact. When the PA determines the potential exists for systemic impact, conditions or items shall be reviewed to determine whether or not a systemic deficiency exists. Conditions or items which have defects but do not impact the system should be reviewed using other methodologies; e.g., Statistical or judgment sampling.

(2) Purposeful sampling is closely related to judgment sampling in that a purely random sample is not drawn. This process is particularly useful for resident PAs who have established a first-hand perspective of the contractor's operations. The use of purposeful sampling presupposes that the PA is aware of an substantial adverse condition within the contractor's property control system that has been disclosed through some other review, occurrence, discussion with or notification by other functional Government area, e.g., Quality Assurance, Production, etc., or contractor operation. Using the information the PA shall purposefully seek out other similar conditions. As this sampling is purposeful, the random number tables in Appendix C would not be used.

3. Selection of Population.

a. The population should encompass the maximum number of items possible within a functional segment that have common characteristics. These characteristics may be categorized by functions, types of property, actions or transactions occurring within the functional segment, or other requirements subject to evaluation. Care should be exercised, however, to ensure that the items in the population have common characteristics and that the same control elements of the property control system apply. Populations selected may be used for the examination of characteristics for more than one function or functional segment; e.g., items selected under the function of acquisition may be used to examine criteria under the functions of receiving.

b. Transactional functions are those functions where a population may be obtained using items selected due to their transactional timeframes. For example, the function of acquisition may be tested by selecting as the population all purchase orders that have been initiated within the past year; the function of receiving may be tested by selecting as the population all receiving reports generated during the past year, etc.

c. Nontransactional functions are those functions where items may not readily be selected due to the lack of transactional timeframes. In such cases, a population may be obtained by estimating or obtaining the entire population. For example, the function of storage does not have transactions but rather the PA reviews the actual storage areas for housekeeping, etc. Therefore, the population consists of all storage sites.

d. In "selecting the population for analysis, the PA shall use the following procedure (except that the procedure shall be optional when limited surveillance will be performed):

(1) The PA shall select the function, functional segment, and criterion to be evaluated.

(2) The PA shall estimate the population for those items that have common characteristics to encompass the maximum number of items possible within a functional segment. This population may be obtained from either:

(a) Those items that lend themselves to transactional analysis that have occurred during a set time frame of either 1 year immediately preceding the date of review, or since the last survey, whichever is less.

(b) All items in a contractor's possession, areas of control, or types of property without regard to timeframe in those cases where a timeframe based sample would be impractical.

4. Selection of Random Numbers

a. Using the population obtained, the PA shall determine into which population range it lies. The PA shall then determine the required sample size from column 2 of Appendix B. This indicates the number of items that must be selected from either the random number tables (Appendix C) or equivalent random number generating method.

b. Numbers selected from either Appendix C, or equivalent, shall be arranged in numerical order.

c. In addition, a second set of sample numbers may be drawn at the this time. This set of numbers is for use in the event there are defects uncovered in the first sample that require additional review in accordance with the rejection rates in Appendix B.

5. Selection of a Sample.

a. If the items in the population to be examined are already consecutively numbered, such as on computer generated lists, the items having the numbers corresponding to those obtained from the random table become the sample items. Where items are not consecutively numbered, the items, to make up the sample, should be obtained by counting the items until each of the sample numbers are reached. Each item corresponding to a sample number becomes a sample item.

b. These items shall be recorded on the appropriate worksheet(s), as determined by each agency, and then subject to the appropriate analysis and evaluation required for each function, functional segment, and the applicable criteria.

6. Evaluation of Sample. The evaluation of a sample and the determinations and findings obtained from that evaluation have implications for future actions on the part of the

contractor and the Government. The actions on the part of the PA may include recommending disapproval of the contractor's property control system, negative pre-award surveys and possible impact on the award of future contracts should corrective actions not be taken by the contractor.

a. The PA shall objectively evaluate the sample for item and element defects that impact the system. Defects that are minor, for example those that do not affect the contractor's system of control of Government property but are more clerical in nature, should not be the basis for finding the sample item, criteria, or functional segment unsatisfactory. Multiple defects may be sufficient to lead the PA to determine that they impact the contractor's system of control to such an extent that the criterion, functional segment, or function may be unsatisfactory.

b. Appendix B sets forth acceptance and rejection rates for the various population and sample sizes dependent upon the number of defects found within a given function, functional segment, or criterion. The PA shall use these rates for the acceptance or rejection of populations selected as functions, functional segments, or criteria. The following decisions shall be made by the PA:

(1) If no defects are found in the first sample, the functional segment or criterion shall be evaluated as satisfactory. (See Column 3, Appendix B.)

(2) If the number of item defects found in the first sample is equal to the number of defects found in column 4 of Appendix B, where the defects are not of a systemic nature the functional segment may be evaluated as satisfactory.

(3) If the number of item defects found in the first sample is equal to the number of defects found in column 4 of Appendix B, where the defects are of a systemic nature, the functional segment shall be evaluated as unsatisfactory.

(4) If the number of item defects found in the first sample is equal to the number of defects found in column 5 of Appendix B, the PA shall use the second sample selected in paragraph B. 4. c., above. If the total number of defects found in both sample 1 and sample 2 equals or is less than the number specified in column 7 of Appendix B, the functional segment shall be evaluated as satisfactory.

(5) If the total number of defects found in both sample 1 and sample 2 equals or is more than the number specified in column 8 of Appendix B where the defects are not of a systemic nature, the functional segment may be evaluated as satisfactory.

(6) If the total number of defects found in both sample 1 and sample 2 equals or is more than the number specified in column 8 of Appendix B where the defects are of a systemic nature, the functional segment shall be evaluated as unsatisfactory.

c. The impact of system defects disclosed during the course of a system analysis, upon the overall system rating, shall be in accordance with agency direction.

C. SYSTEMS ANALYSIS TECHNIQUES BY PROPERTY FUNCTION

1. Introduction. The PA is responsible for assuring that the contractor is adequately controlling, protecting, preserving, maintaining, using, and reporting Government property in accordance with the contract, FAR 45.5, and other contractually imposed requirements and directions as well as complying with their approved property control system. To accomplish this action, the PA shall use the Functions, Functional Segments and Criteria in Appendix A of this Manual in the evaluation of the contractor's property control system during a system analysis. The PA must exercise judgement in the selection of the Functions, Functional Segments, and Criteria to be reviewed and analyzed during a System Analysis as not all Functions, Functional Segments, and Criteria may be applicable. This may be due to the type of property in the possession of the contractor, the authorities provided the contractor (e.g., no contracts authorizing the acquisition of CAP or GFP), subcontracting practices, or the types of controls instituted over the Government property in the possession of the contractor (e. g., "Receipt and Issue" versus perpetual inventory records). The following factors should be considered, along with agency direction, to ensure adequate coverage of requirements peculiar to particular classes of property and property system elements.

2. Testing Property Management. The PA is responsible for ensuring that the contractor establishes and maintains an approved property control system. The basic objective is to determine the effectiveness of the contractor's property management system and the possible systemic impact of an y deficiencies identified. An additional objective of this review is to provide a management overview identifying causal factors that may contribute to deficiencies in other functions and functional segments. Subjective evaluations may include outlining the scope of the system analysis performed, summarizing the functions and functional segments reviewed, and examination of any deficiencies identified for possible trends. Lack of training provided to the contractor's personnel, ineffective communication between organizational elements, failure to be responsive to identified deficiencies, failure to establish current and adequate procedures, or failure to provide adequate protection for Government property to prevent LDD are examples of trends that may have an adverse impact on the contractor's property control system. When the contractor is participating in a self audit program, such as the Contractor Risk Assessment Guide (CRAG) program periodic internal audits are scheduled by the contractor and should be performed in accordance with this schedule. Deficiencies disclosed through these types of internal audits should be disclosed to the PA and corrective actions taken, by the contractor, to correct and prevent reoccurrence of the disclosed problems. Where deficiencies were disclosed through the contractor's internal audit and not corrected, the PA shall notify the contractor and request prompt correction.

3. Testing Acquisition

a. General. The primary objective of conducting a system analysis on the acquisition of Government property is to ensure that only those items and quantities authorized by contract terms and conditions are acquired or fabricated and to ensure the validity of the property classifications. To meet this objective, the PA's analysis shall include a review of the actual procurement and fabrication documents, including material requisitions, purchase orders, contract transfer documents, petty cash documents, fabrication orders, or engineering change proposals, as applicable. These documents may serve as the population for selection of the sample to be analized. The PA should also review the cost vouchers submitted to the CO for payment to obtain information regarding the dollar value of direct charges for property against the contracts to ensure that reviews encompass all property charges to the contract. Another objective is to determine if contractor acquisitions involve excessive quantities resulting in unnecessary costs and increased storage and handling charges. Examination of the items acquired is necessary to determine if the property is appropriate for direct charge under the contract and reasonably required in the performance of the scope of work. Examination of manufacturing order quantities is also necessary to determine if excessive quantities of parts or assemblies (taking into consideration minimum buys, bulk purchases, mortality, economic order or manufacturing quantities, etc.), were manufactured.

b. Acquisition of Special Test Equipment. The PA shall review the acquisition of STE to assure that the contractor has submitted the required notice of intent as specified in the Special Test Equipment Clause (FAR 52.245- 18). Attention to the proper classification of STE is of primary importance to prevent the misclassification and acquisition of general purpose test equipment as Special Test Equipment.

c. Acquisition of Facilities. The PA shall review the acquisition of facilities to ensure that only those items authorized by the contract or CO were acquired. The PA shall review DIPEC or other screening requirements (e. g., DARIC, NASA, etc.) to ensure that items were not acquired when Government assets were available.

d. Supplemental Material Acquisition Reviews. PAs are encouraged to perform a supplemental material acquisition review on all production contracts completed since the last analysis when the following conditions are present:

(1) GFM or CAM are accountable;

(2) a bill of material, Material Requirements Lists, or Master Production Schedule exists; and,

(3) there are limited engineering changes.

These reviews will be performed by comparing the bill of material to the total quantity acquired and the total quantity acquired to the bill of material to ensure that material is not in excess of the total bill of material requirements, after allowing for a spoilage factor,

engineering changes, etc. PAs may recommend to the CO that excessive acquisition costs be disallowed and/or possible disapproval of the contractor's property control system. Where excessive GFM is identified, the PA shall notify the MCA(s) for corrective action.

4. Testing Receiving

a. Receiving Process. The PA's responsibilities, as part of the system analysis program, includes a review of the contractor's receiving system to ensure that the system specifies:

(1) Physical inspection of the shipping containers for evidence of obvious damage, comparison of incoming receipts with due-in records to determine if the correct item and/or quantity was received, and immediate notification to shipper (driver) of obvious damage disclosed during the initial receiving of Government property.

(2) Special handling instructions regarding the acceptance inspection and/or test requirements, sensitive property; i.e., precious metals, explosives, corrosive chemicals, etc., and special storage requirements.

(3) Documentation supporting receipt. The PA must ensure that procedures require the receiving documents be maintained, distributed, and contain the entries necessary for the protection of the Government's interest. The PA should examine receiving reports and/or Government shipping documents (DD Form 1149, "Requisition and Invoice/Shipping Document"; DD Form 250, "Material Inspection and Receiving Report"; DD Form 1348-1, "DoD Single Line Item Release/Receipt Document"; and MCA reports). The population may be determined from the contractor's receiving dock log, MCA reports for GFM, property number register for equipment, and fabrication records, where applicable.

5. Testing Identification. The PA is responsible for ensuring that the contractor has established proper procedures for the identification, marking, and recording of Government property upon receipt or fabrication, unless exempted by FAR 45.506. The basic objective is to determine the effectiveness of the contractor's system in identifying Government property. A thorough analysis would validate that the assigned numbers are recorded on all applicable documents, as well as marked on the particular pieces of property. The PA shall use as the population all property records. Testing of this function may be accomplished during the testing of other functional segments.

6. Testing Records. The PA is responsible for ensuring that the contractor has established proper records for all Government property. The basic objective is to determine the effectiveness of the contractor's system of records for accountability of Government property in accordance with FAR 45.5 and other applicable contract requirements. In conducting reviews of the records function, the PA should examine the contractor's accountable records and support documentation by physical verification. The following guidance is provided to aid the PA in selecting appropriate documents for establishing a

population and selecting samples:

a. The population for the function of records may be obtained from the following: stock records (whether manual or automated, for all classes of Government property, except for material accountable under a receipt and issue system), receipt and issue files, historical records, fabrication records, custodial records, warranty item records, and scrap and salvage records.

b. Samples from these populations shall be reviewed for proper postings of receipts, issues, returns, inventories, adjustments, and disposition, in an accurate, complete and timely fashion. Documentation should be available to support all entries. These support documents may consist of receiving reports, requisition slips, issue documents, inventory adjustment vouchers, transfer documents, shipping documents, etc. Verification of the actual physical property (location, description, quantity, etc.) is required as part of this review. In addition to the records to property review, the PA shall perform a property to records review to ensure that records have been established and the locator system is adequate.

7. Testing Movement. The PA is responsible for ensuring that the contractor has established a proper method of movement for all Government property. The basic objective is to determine if Government property is moved under the proper authority, with appropriate documentation, adequate protection is provided during movement, location changes are promptly posted to the records, and any losses or damage occurring during movement are promptly reported to the PA. The population for the function may be drawn from all issue slips, shipping tickets, location change orders, custodial transfer documents, maintenance work orders, and other similar documents. The testing of movement may also be accomplished during the testing of other functional segments.

8. Testing Storage. The PA is responsible for ensuring that the contractor has established a proper method of storage for all Government property. The basic objective is to determine the effectiveness of the storage function on the control, protection, and preservation of the Government property in storage. This function is normally reviewed by visual inspection of the areas where Government property is stored. Visual inspection of these areas may also be accomplished during the testing of other functional segments. Subjective evaluation may include reviewing the housekeeping, access, packaging, and preservation of the Government property located in the storage areas. For example, the storage areas are clean and organized, access is limited to authorized personnel, and items are treated for short term or long term preservation. Objective evaluation may include reviewing the physical security of the Government property located either in inside storage or outside storage, if required. For example, for outside storage of Government property there is adequate lighting, fencing, or control of access to those locations to prevent theft of Government property. In addition, items stored outside are not prone to rust or deterioration and may be better suited to inside storage. Certain types of Government property, such as arms, ammunition, and explosives, may require more stringent storage requirements. Where necessary, the review of these storage areas should be coordinated with the appropriate

Government technical representatives; e.g., Quality Assurance, Safety, or Security.

9. Testing of Physical Inventories

a. The PA is responsible for ensuring that the contractor has scheduled and performed physical inventories of Government property in accordance with the contractor's approved property control system. The basic objective is to determine the effectiveness of the physical inventory function about physically locating and counting Government property, comparing the results to the records, posting the findings and adjustments, and reporting the adjustments to the PA.

b. The PA has the option of performing analyses of the contractor's physical inventories either during the performance of the inventory or subsequent to its completion. In either case, the tests shall evidence physical counts of selected items without knowledge of record balances, verification of the entries on count slips, comparisons with records, preparation of documents necessary for any adjustments required, approval of adjustments, and the referral of lists of all recorded adjustments to the PA. Populations and their respective samples may be drawn from records of Government property or from physical inventory documentation such as count slips, inventory tickets, computer printouts, or similar items. Subjective evaluations may include a review of the techniques employed by the contractor to accomplish the physical inventory; e.g., ensuring the inventory was accomplished and completed as scheduled, ensuring the inventory was not performed by the individual(s) responsible for keeping the records, and inventories are performed at contract completion, when required.

c. Property to Records. The PA may select a judgmental sample of all types of Government property from the contractor's working areas; e.g., manufacturing areas, fabrication areas, storage areas, etc. to ensure that the physical inventory has been performed and recorded.

10. Testing Reports Preparation. The PA is responsible for ensuring that the contractor has established a proper method of preparation and submission of reports that reflect the status of Government property, as required by contract or regulation. The basic objective is to determine the accuracy, completeness, and timeliness of submission. Evaluation may include reviewing such reports as the DD Form 1662 (DOD Property in the Custody of Contractors), NASA 1018, and other reports as required by contract terms and requirements, e.g., repair status, GFM reports, etc. Chapter 3, section L, of this Manual provides specific guidance on the property control system requirements concerning the DD Form 1662.

11. Testing Consumption of Materials

a. The purpose of consumption analyses is to determine that materials are consumed commensurate with contract requirements, with reasonable allowances for scrap and spoilage and not diverted to other work. The PA shall evaluate consumption consistent

with the contractor's environment, be that production; overhaul, modification, and repair; or research and development (R & D). Consumption may be tested using the Consumption Analysis Worksheet (Appendix D), or automated equivalent.

b. Reasonableness of consumption in an R&D environment requires a somewhat different approach since bills of material are not normally available. The quantity issued for use must be determined by examining the issue or movement documentation. The decision on whether the consumption was reasonable depends primarily on judgment supported by sufficient investigation to reach a decision. When the quantity issued is relatively small, indicating immediate use, then there is little possibility of unreasonable consumption. However, where a larger quantity is issued, the possibility of unreasonable consumption may exist. Additional discussion with Government technical personnel may be used to confirm the conclusions. The adequacy of the physical controls should also be considered as this is a factor that may have a bearing on the possibility of unauthorized use or pilferage.

c. A consumption analysis should be performed outside of the system analysis when the PA has identified symptoms of unreasonable consumption. These conditions are most readily visible when it is determined that the contractor has exhausted the stock of materials before contract completion or has acquired quantities that exceed planned material requirements. When these conditions are identified, consumption analyses should quantify the extent of the problem and identify causal factors. When the survey discloses consumption of Government material that is considered unreasonable by the PA, action shall be. initiated to determine the liability of the contractor for the unreasonable consumption.

d. The Consumption Analysis Worksheet (Appendix D) has been developed to be used as a tool in performing these analyses. The worksheet format provides latitude to the user, and all elements do not apply to all materials being reviewed. The format may be adapted by the PA for analyses on R & D, production, or overhaul and repair contracts.

e. Consumption analysis reviews can be extremely complicated and the format may require modification to address certain conditions. As such, it is not considered mandatory as long as adequate consumption analysis techniques are applied when required. Each PA is responsible for the adequacy of consumption analyses and for providing sufficient training to industrial property management specialists to ensure that reviews are properly performed.

12. Testing Utilization. The PA is responsible for ensuring that the contractor has used Government property in accordance with contractual authorization and the contractor's approved 'property control system. The basic objective is to determine if the contractor is using the Government property for the purposes and time authorized. The population should be selected from all Government property records (excluding material), stratified by property type with corn-m-on utilization characteristics. For example, ST and STE may be grouped as one population for sampling purposes. All IPE may be grouped as one population due to its common utilization requirements. The PA must use sound judgment in determining the

groupings selected for testing the utilization function. The PA should be particularly concerned with any unauthorized use, use in excess of allowable time on non-Government work, proper recording of actual use, and failure to maintain the required utilization records.

a. Agency Peculiar Property (APP), Special Test Equipment (STE) and Special Tooling (ST). The contractor should use APP, STE, and ST for authorized purposes only, and have a system to determine if this property is excess to the contractor's needs. There must be a contractual requirement for each item in the possession of the contractor. The PA should perform utilization evaluations to ensure the proper utilization and declaration of excess. There is no formula for determining a minimum level of use for these items as they are specialized in nature, and are needed for a specific use. PAs should be aware that the utilization levels of these items may be affected by the purpose of the contract (overhaul and maintenance versus production), the type of testing the item was used for (continuous versus final acceptance), and lastly the reason the property was provided; e.g., as a model or for configuration standards.

b. Facilities. The PA is responsible for performing a review of the utilization of facilities but this review may be delegated to other appropriate technical representatives. The PA should ensure that facilities are used only as authorized. The PA should be particularly concerned with the authorized limits of non-Govemment usage as set forth in FAR 45.407 and as approved by the CO. In addition, the PA should be aware that non-Government use that exceeds 25% of the time available for use requires advance approval of the head of the agency.

c. PAs should conduct reviews as part of the system analysis program of vehicular equipment provided to the contractor in support of contract performance. Such reviews should be made to ensure that Government-owned vehicular equipment is in an economical operating condition and is still justified for retention by the contractor, and meets the requirements of DoD 4500.36-R.

13. Testing Maintenance. The PA is responsible for ensuring that the contractor has established a proper method of maintaining Government property. All property shall be reviewed to ensure that all required maintenance is scheduled and performed. The population for analysis may be selected from all items that require maintenance as part of their normal operation or stratified by property type requiring varying levels of maintenance actions. Maintenance actions and records shall be reviewed to determine that they have been performed and recorded in accordance with the maintenance portion of the contractor's approved property control system. Also, maintenance and repair records shall be analyzed to determine the cause of breakdown to ascertain the possibility of inadequate preventive or routine maintenance. This function may be reviewed by technical specialists other than the PA.

14. Testing Subcontract Control. The PA is responsible for ensuring that the prime contractor has established adequate control over its subcontractors who have been provided

Government property. This may take place either through the prime contractor performing surveillance of its subcontractors or through the prime contractor electing to rely upon the Government's surveillance through the operation of a support property administration delegation. The PA should be aware of all subcontracts, purchase orders, IDWAs, IOTs, etc., that contain or provide Government property to a subcontractor. The population for analysis may be predicated on these documents. Areas within the subcontract function that are of critical concern are:

a. The flowdown of proper clauses and provisions; e.g., the requirements of FAR 45.5, the liability requirements, the ST and STE clause requirements, where applicable.

b. The required approvals by the CO for incorporation and flowdown of the limited risk of loss provisions, and the administration of the risk of loss provisions on behalf of the Government for any instances of LDD of Government property in the possession of the subcontractor.

c. The adequacy of the contractor's system of surveillance incorporated in its property control system and applied throughout the life of the subcontract, etc.

15. Testing Disposition

a. The PA is responsible for determining if the contractor has a system for disclosure of excess Government property and effecting its timely disposition. The basic objective is to determine the effectiveness of the disposition function on screening, identifying, submitting inventory schedules to the proper Government representatives, and obtaining the proper authority for disposal of excess Government property.

b. This function is normally reviewed by selecting as a population all disposal records including plant clearance cases, transfers, scrap tickets, GFM return documents, and other appropriate documents. These records should include a file containing proof of in-house screening and a copy of the inventory schedule or other appropriate documents. In addition, the contractor's records shall have, written authority for disposal and a copy of the disposal document to provide a complete audit trail. When appropriate, the PA should ensure that the contractor has a system for properly crediting the Government with the proceeds realized from the sales of assets.

c. When plant clearance is performed in residence, portions of the disposition function analysis may be performed by the Plant Clearance Officer (PLCO) instead of the PA. This is predicated upon their continuous visibility of the disposition process. In any case, the PA should interface with the PLCO to obtain information related to system effectiveness that is visible from the plant clearance perspective.

d. Testing authority for disposition. The PA must determine that disposition of Government property is based on contractual or other Contracting Officer authorizations.

When all property has been dispositioned through plant clearance, the PA may select samples from inventory schedules or other plant clearance documentation for this analysis. However, when multiple disposition methods are utilized; i.e., transfers, returns to supply sources, plant clearance, etc., the PA should select samples from inventory records reflecting disposition to determine that all actions taken were properly authorized. This analysis is appropriate in conjunction with the contract closure task. If the disposal action was unauthorized, the contractor should investigate and report the incident for determination of liability or other remedy before relief of responsibility.

16. Testing Contract Close-Out

a. The PA is responsible for ensuring that the contractor has a method to ensure that all contract close-out actions related to property are completed. The basic objective is to determine the timeliness and effectiveness of the contractor property close-out function.

b. This function may be analyzed during the PA's final review of contractor close-out actions, or the PA may test all contractor close-out actions over a period of time. Subjective evaluation may include reviewing the timeliness of submission of contractor close-out reports, accuracy of reports, the adequacy of the contractor's method for tracking contracts nearing completion, and the timely initiation of appropriate actions to close-out affected contracts. Objective evaluations may include verifying that the contractor has obtained all required authorizations for property transfer, completed directed disposition actions, ensured completion of liability determinations, and submitted all required reports, including a close-out DD Form 1662.

c. When no contract close-out actions have been initiated or completed since the last analysis, the PA may only address the tracking of contracts nearing completion. Where no contract close-out actions have been reported, the PA should review for any contracts that have been completed but not reported for close-out.